

Abstract

5 A stereo imaging based vision system is calibrated to provide heights above the ground
plane for any point in the field of view. Therefore, when any object enters the field of view, it
generates interest points called "features," the heights of which are measured relative to the
ground plane. These points are then clustered in 3D space to provide "objects." These objects
are then tracked in multiple frames to provide "trajectories." Such a system could then control
alarm signals or actuate gates or motion control devices, for example, based on the various
10 pieces of information generated about the object.

#1169575 v4 - 20243/28